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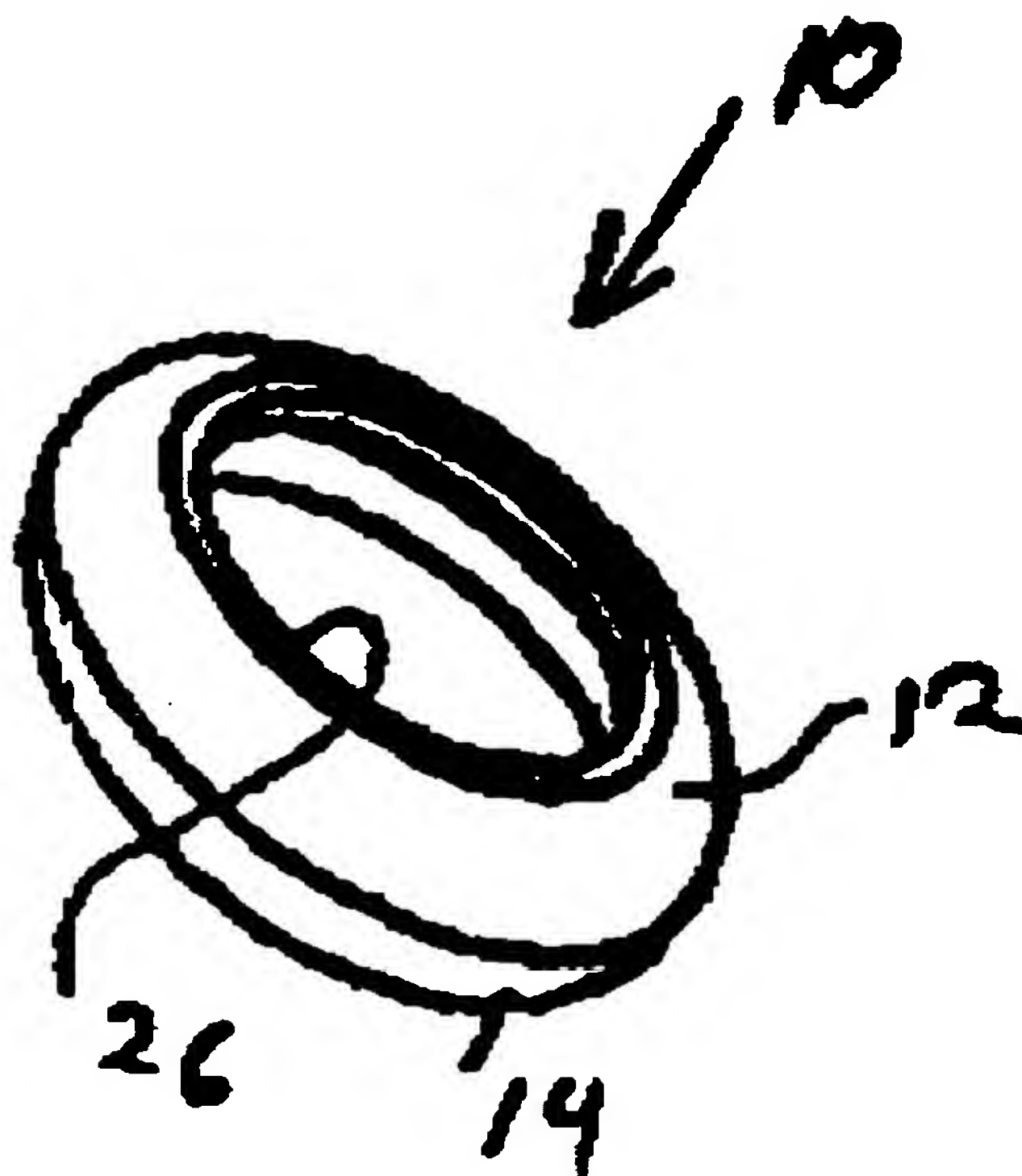
(71) MAGIC SLIDERS, L.P., US

(51) Int.Cl.⁶ A47C 31/00

(30) 1998/12/17 (09/216,112) US

(54) **SUPPORT AUTO-FIXABLE POUR ARTICLES
D'AMEUBLEMENT**

(54) **SELF-ATTACHING SUPPORT FOR ARTICLES OF FURNITURE**



(57) A sliding support for a legged article, such as an article of furniture, that can be attached to the article without the need for a separate fastener. The inventive support will not become dislodged if the article of furniture is moved, can be reused many times, and not will not damage the legs of the furniture. The support includes a resilient element for gripping the legs of an article of furniture and a slidable element for contact with the floor. The interengagement of the two elements assures that the support will not become dislodged as the article is moved.

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ABSTRACT OF THE DISCLOSURE

5 A sliding support for a legged article, such as an article of furniture, that can be attached to the article without the need for a separate fastener. The inventive support will not become dislodged if the article of furniture is moved, can be reused many times, and will not damage the legs of the furniture. The support includes a resilient element for gripping the legs of an article of furniture and a slidable element for contact with the floor. The interengagement of the two elements assures that the support will not become dislodged as the article is moved.

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SELF-ATTACHING SLIDING SUPPORT FOR ARTICLES OF FURNITURE

Background of the Invention

This application is directed to a device for supporting the legs of an article, such as an article of furniture, for sliding support along a surface such as a floor. More particularly, this application is directed to a support device which will permit the article to be readily slid along a surface, which does not require separate fastener to attach the device to the article of furniture, and which can readily accommodate a range of leg sizes.

Over the years many devices have been proposed for supporting various legged articles, such as articles of furniture, over a floor so that the article of furniture will not damage the floor or prevent the furniture from being slidably displaced. Other similar devices seek to prevent the article of furniture from being easily moved. Such devices are shown in British Patent No. 4,073; as well as U.S. Patents Nos. 1,861,095; 1,903,690; 1,969,266; 3,326,508; 5,094,416 and 5,573,212. Many of the prior art devices simply rest on the floor and are not attached to the legs of the article of furniture, and rely on the gravity to position the legs on the supporting device. Other prior art devices are physically attached to the legs of the article of furniture by separate fasteners such as screws, nails, posts or an adhesive pad.

A problem with the first category of furniture support devices, in which the article of furniture merely rests on the support, is that the support can easily become disengaged from the legs of the furniture if for example, the article of furniture is slightly lifted. A shortcoming of the second category of devices, which utilize an separate fastening device, such as a screw or nail, is

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that the fastener can easily become lost and can damage the furniture leg, or can only be used once, such as when an adhesive pad is used as a fastener. Furthermore, many devices of both types can accommodate only legs of exact sizes requiring retailers to carry many different sizes of supports. The present invention is directed to overcoming the deficiencies of the prior art.

5 The present invention is directed to a sliding support device for a legged article, such as an article of furniture, that can be attached to the article without the need for an separate fastener, and which can accommodate a range of leg sizes. The inventive support device will not become dislodged if the article of furniture is moved, can be reused many times, and will not damage the legs of the furniture.

10 Brief Description of the Drawings

For a better understanding of the invention, reference is made to the following drawings which are to be taken in conjunction with the detailed description to follow:

FIG. 1 is a perspective view of the self-attaching sliding support constructed in accordance with the present invention;

15 FIG. 2 is a sectional view of the self-attaching sliding support for an article of furniture in accordance with the present invention; and

FIG. 3 is an enlarged sectional view of the interengagement of the elastomeric and sliding elements of the device.

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Detailed Description of the Drawings

FIGS. 1 and 2 are perspective and sectional views of a self-attaching slidable support 10 for an article of furniture. Support 10 includes a first elastomeric element 12 and a second sliding element 14. Elastomeric element 12 includes a relatively thick base portion 16 which will serve to cushion the weight of the article to be supported. Molded integrally with base portion 16 of elastomeric element 12 is an upstanding concave inwardly extending circumferential rim 18. Rim 18 is generally "C" shaped and serves to engage a leg 20 of the article of furniture to be supported. As rim 18 is formed from elastomeric material, it is free to elastically engage the perimeter of leg 20. Furthermore, rim 18 is also capable of accommodating legs of a range of sizes and shapes.

As is seen in FIG. 2, the edge 22 of rim 18 extends inwardly and overhangs the interior space 24 of elastomeric element 12. The diameter of the circular opening 26 of rim 18 is shown in Figure 2 as dimension A. However, the diameter of interior space 24 of element 12 is shown as dimension B which is larger than that of dimension A. As rim 18 will elastically deform when leg 20 is inserted therein, support 10 can thus accommodate furniture legs in the diameter range of A to B. Furthermore, rim 18 will also accommodate square or rectangular legs whose diagonal is within the range A to B. This reduces the number of sizes of supports 10 that a retailer needs to carry in stock. In addition, the generally circular support 10 shown herein could also be oval or rectangular in plan view.

Sliding portion 14 is generally cup shaped and is joined to the underside of elastomeric portion 12 so that it will rest on the surface on which the article of furniture is to be supported.

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Sliding portion 14 is preferably fabricated from a hard relatively low friction plastic such as polytetrafluoroethylene (PTFE/Teflon) or Ultra High Molecular Weight Polyethylene (UHMWPE). Alternatively, many other relatively hard plastics or metals could also be used for sliding portion 14. FIG. 3 is an enlarged sectional view of the interengagement of elements 12 and 14 at the periphery of support 10. The outer edge of elastomeric element 12 includes a flange 30 which extends outwardly and is disposed along the horizontal center line 32 of support 10. The width of flange 30 is approximately equal to the thickness of the material used to form sliding element 14. The rigid material of sliding element 14 will support elastomeric element 12 and form a "bumper" should support 10 hit another object. This arrangement also ensures that any turning moments created as the furniture is moved along the floor will not cause forces tending to separate elements 12 and 14 and also that support 10 will not become disengaged from leg 20. Further assuring the retention of support 10 on leg 20 is the fact the rim portion 18 of elastomeric element 12 tapers in thickness from a widest portion located at flange 30 to a narrowest portion at its edge 22. This ensures that elastomeric element 12 will be biased toward leg 20 and will freely flex to accommodate a range of leg sizes.

Suitable materials for elastomeric element 12 are flexible plastics or rubbers such as Nitrile rubber which is readily moldable. The use of a elastomeric element 12 leads to an efficient manufacturing process which bonds elastomeric element 12 and sliding element 14 together. In this process, sliding element 14 is first formed and is placed in the cavity of the mold for elastomeric element 12, which is then molded and vulcanized with element 14 in the mold. This will securely bond elements 12 and 14 together, and will provide the appearance of a smooth

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continuous outer surface to support 10. This manufacturing methodology assures the formation of flange 30.

5 The present invention has been described with respect to particular embodiments which should not be construed to exclude application of the present invention under other circumstances which employ the device to a more limited degree or with altered dimensions. It will be readily apparent to one of ordinary skill in the art that the present invention has many other applications consistent with its design.

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What Is Claimed Is:

1. A slidable support for an article comprising:
 - a. a first elastomeric element for elastic engagement with a leg of the article to be supported, said first elastomeric element having a base portion and a circumferential
5 inwardly extending rim for gripping the periphery of a leg of the article to be supported, said rim including a horizontally disposed flange located at the outer periphery of the elastomeric element;
and
 - b. a second sliding element constructed of a low friction material joined to the exterior lower portion of said elastomeric element for contact with a surface upon which the article
10 is to be supported, said sliding element engaging the flange thereof so as to provide support for the rim of the elastomeric element.
2. The sliding support as claimed in claim 1 wherein the circumferential rim is generally "C" shaped and is tapered from a widest portion at the flange, to a narrowest point towards the center of the elastomeric element.
- 15 3. The sliding support as claimed in claim 1 wherein the support is circular in plan view.
4. The sliding support as claimed in claim 1 wherein the elastomeric element comprises rubber and wherein the slidable element comprises a relatively rigid plastic.

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5. The sliding support as claimed in claim 4 wherein the elastomeric element is molded together with the plastic element so as to be integrally joined.

6. The sliding support as claimed in claim 4 wherein the elastomeric element comprises Nitrile rubber.

5 7. The sliding support as claimed in claim 4 wherein the slidable element comprises polytetrafluoroethylene.

8. The sliding support as claimed in claim 4 wherein the slidable element comprises ultra high molecular weight polyethylene.

9. A slidable support for an article comprising:

10 a. a first elastomeric element for elastic engagement with a leg of the article to be supported, said first elastomeric element having a base portion and a circumferential inwardly extending rim for gripping the periphery of a leg of the article to be supported, said rim including a horizontally disposed flange located at the outer periphery of the elastomeric element; and

15 b. a second sliding element constructed of a low friction material joined to the exterior lower portion of said elastomeric element for contact with a surface upon which the article is to be supported, said sliding element having a thickness substantially equal to that of the flange

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of the elastomeric element and extending around the lower portion of the elastomeric element and engaging the flange thereof so as to provide support for the rim of the elastomeric element.

5 10. The sliding support as claimed in claim 9 wherein the circumferential rim is generally "C" shaped and is tapered from a widest portion at the flange, to a narrowest point towards the center of the elastomeric element.

11. The sliding support as claimed in claim 9 wherein the support is circular in plan view.

12. The sliding support as claimed in claim 9 wherein the elastomeric element comprises rubber and wherein the slidable element comprises a relatively rigid plastic.

10 13. The sliding support as claimed in claim 12 wherein the elastomeric element is molded together with the plastic element so as to be integrally joined.

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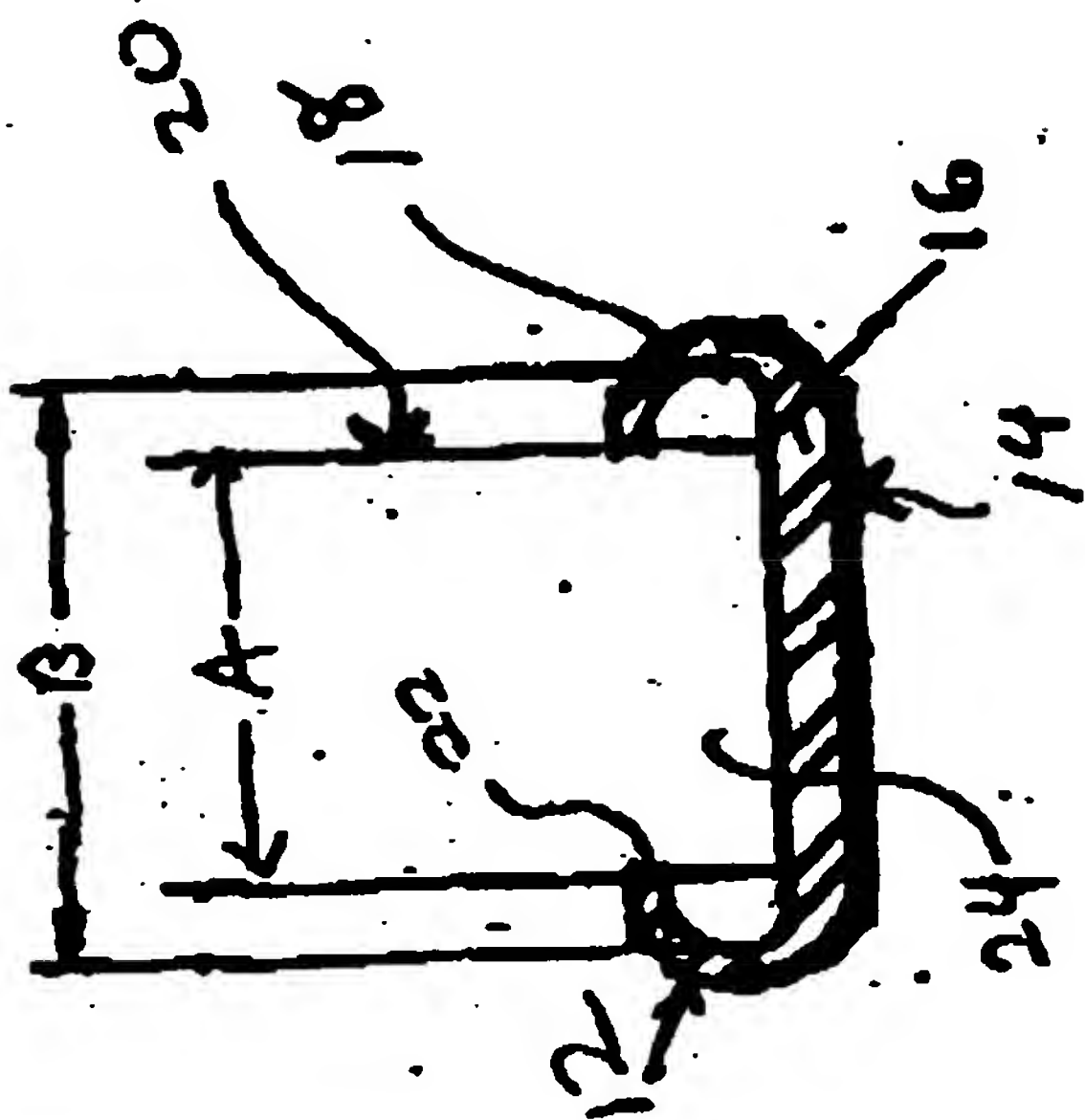


FIG 2

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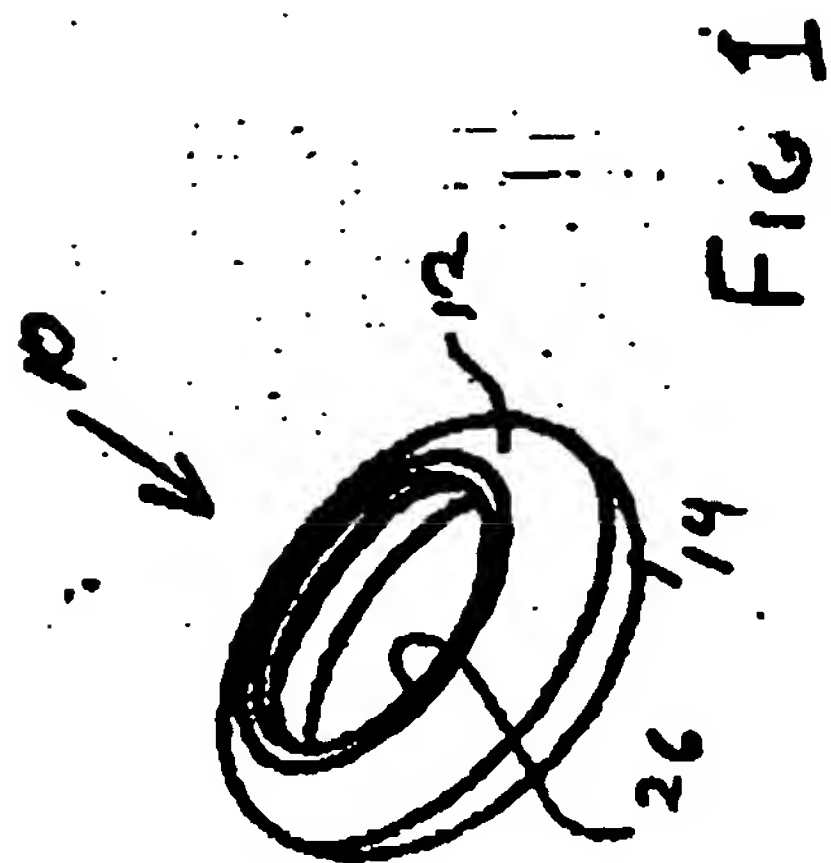


FIG 1

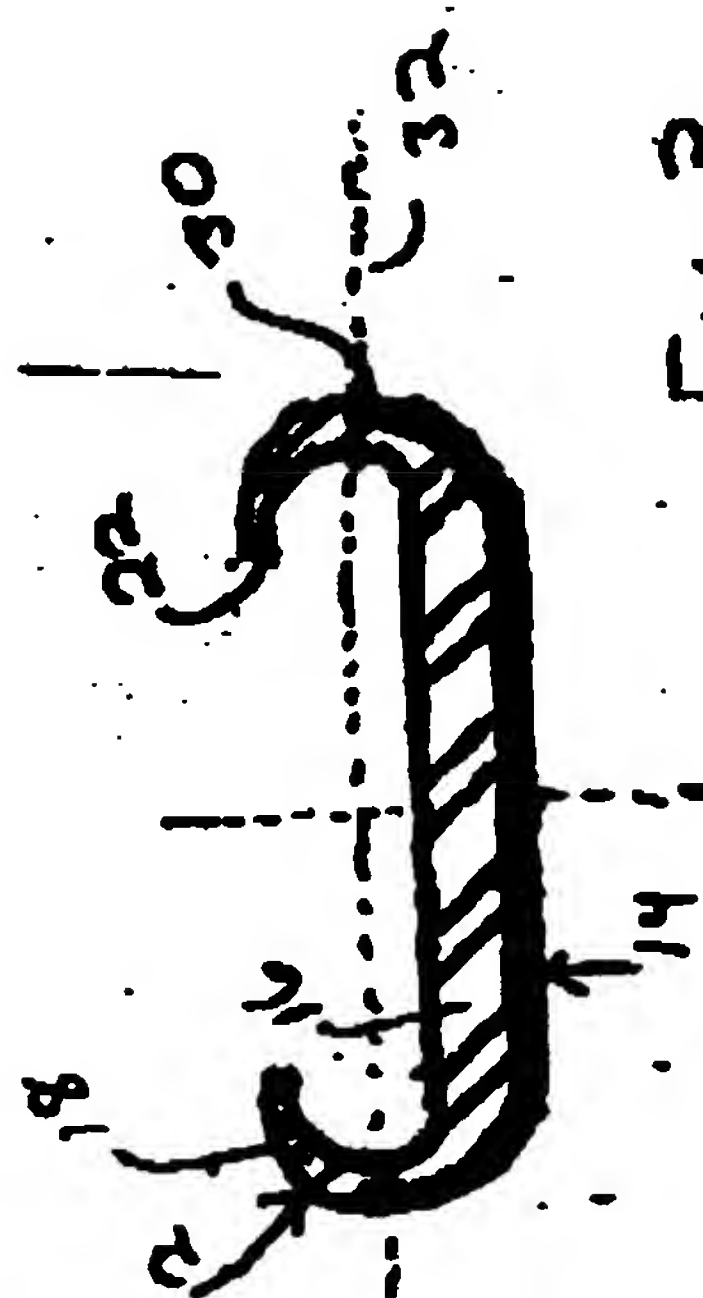


FIG 3

DERWENT-ACC-NO: 2000-638779

DERWENT-WEEK: 200309

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TITLE: Slidable support for the legs of furniture articles
comprises a first resilient elastomeric portion for
gripping the article leg and a second slidable portion
for contact with the floor

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PATENT-ASSIGNEE: MAGIC SLIDERS LP[MAGIN]

PRIORITY-DATA: 1998US-0216112 (December 17, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
CA 2262138 A1	June 17, 2000	E	011	A47C 031/00

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
CA 2262138A1	N/A	1999CA-2262138	February 17, 1999

INT-CL (IPC): A47C031/00

ABSTRACTED-PUB-NO: CA 2262138A

BASIC-ABSTRACT:

NOVELTY - A slidable support comprises a first elastomeric portion (12) for elastic engagement with the article leg (20), and a second sliding portion (14) constructed of a low friction material. The elastomeric element has a base (16) and a rim (18) for gripping the periphery of the leg.

DETAILED DESCRIPTION - A slidable support for a furniture article comprises a first elastomeric portion for elastic engagement with the article leg. The elastomeric portion has a base and a circumferential inwardly extending rim for gripping the periphery of the leg. The rim includes a horizontally disposed flange at the outer periphery of the elastomeric portion. A second sliding portion constructed of a low friction material is joined to the exterior lower portion of the elastomeric portion, and engages the flange to support the rim.

USE - For supporting the legs of furniture articles.

ADVANTAGE - The inventive support can be attached to the furniture article without the need for a separate fastener. It will not become dislodged as the article is moved and can be reused many times without damaging the furniture legs. It readily slid along a surface and can accommodate range of leg sizes.

DESCRIPTION OF DRAWING(S) - The figure shows a sectional view of the self-attaching sliding support.

First elastomeric portion 12

Second sliding portion 14

Base 16

Rim 18

Furniture leg 20

CHOSEN-DRAWING: Dwg.2/3

**TITLE-TERMS: SLIDE SUPPORT LEG FURNITURE ARTICLE COMPRISE FIRST RESILIENT
ELASTOMER PORTION GRIP ARTICLE LEG SECOND SLIDE PORTION CONTACT
FLOOR**

DERWENT-CLASS: A84 P26

CPI-CODES: A12-D01;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

**018 ; R00817 G0475 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F12
; R00806 G0828 G0817 D01 D02 D12 D10 D51 D54 D56 D58 D84 ; H0022
H0011 ; H0124*R ; S9999 S1434 ; P0328 ; P0088 ; P0124 ; P0135**

Polymer Index [1.2]

018 ; ND01 ; Q9999 Q7716 Q7681 ; K9416

Polymer Index [1.3]

018 ; B9999 B4024 B3963 B3930 B3838 B3747

Polymer Index [2.1]

**018 ; R00975 G0022 D01 D12 D10 D51 D53 D59 D69 D82 F* 7A ; H0000
; S9999 S1434 ; P0511**

Polymer Index [2.2]

**018 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82 ;
H0000 ; P1218 P1161 ; S9999 S1434 ; P1150**

Polymer Index [2.3]

018 ; ND01 ; Q9999 Q7716 Q7681 ; K9416

Polymer Index [2.4]

**018 ; Q9999 Q7603*R ; B9999 B5367 B5276 ; B9999 B4079 B3930 B3838
B3747**

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-192188

Non-CPI Secondary Accession Numbers: N2000-473799

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